INCH-POUND
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SUPERSEDING
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MILITARY SPECIFICATION SHEET

CAPACITORS, FIXED, ELECTROLYTIC (DC, ALUMINUM, DRY ELECTROLYTE, POLARIZED) STYLES CE63 AND CE64

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-C-62.

Inactive for new design
(For replacement purposes only)

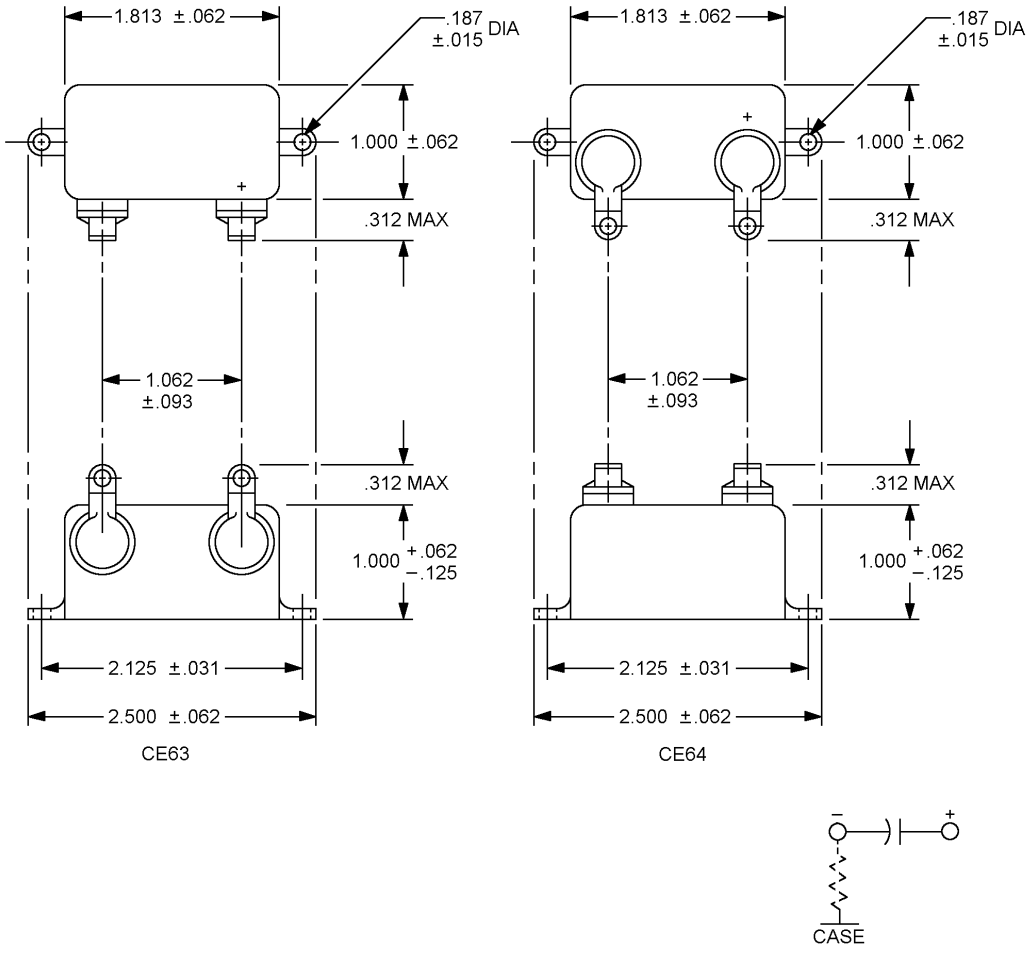

FIGURE 1. Dimensions and configuration.

Inches	mm	Inches	mm
.015	0.38	.312	7.92
.031	0.79	1.000	25.40
.062	1.57	1.062	26.97
.093	2.36	1.813	46.05
.125	3.18	2.125	53.98
.187	4.75	2.500	63.50

NOTES:
1. Dimensions are in inches.
2. Metric equivalents (to tile nearest 0.01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.
3. Capacitors are mounted by lugs (Family 5).
4. There is an indeterminate resistance between the metal case and the negative terminal.

FIGURE 1. Dimensions and configuration - Continued.

TABLE I. Styles CE63 and CE64 capacitors.

PIN	Capacitance	DC rated voltage	DC leakage current	Maximum Impedance At 120 +10 Hz -5 At-40° +0°C -3	Dissipation factor
	µF	volts	µA	ohms	percent
CEG3C101E	100	15	58	750	20
CE63C250F	25	25	38	1,200	20
CE63C750F	75	25	66	400	20
CE63C250G	25	50	53	1,000	15
CE63C500G	50	50	75	500	15
CE63C250H	25	100	75	720	15
CE63C200J	20	150	83	800	12
CE63C150K	15	200	83	940	12
CE63C120M	12	250	83	1,000	12
CE63C100N	10	300	83	1,000	12
CE63C8R0P	8	350	80	3,200	12
CE63C6R0Q	6	400	74	3,400	12
CE63C4R0R	4	450	64	5,000	12
CE64C101E	100	15	58	750	20
CE64C250F	25	25	38	1,200	20
CE64C750F	75	25	66	400	20
CE64C100J	10	150	58	1,600	12
CE64C200J	20	150	83	800	12
CE64C100K	10	200	67	1,400	12
CE64C100N	10	300	83	1,000	12
CE64C8R0P	8	350	80	3,200	12
CE64C4R0R	4	450	64	5,000	12

REQUIREMENTS:

Dimensions and configuration: See figure 1 and table I.

Case type: Bathtub, side mounting lugs (CE63) and bottom mounting lugs (CE64).

Capacitance value: See table I.

Capacitance tolerance:

At 200 volts, dc rated, and above: -10, +50 percent (A).

At 150 volts, dc rated, and less: -10, +75 percent (B).

Operating temperature range:

For 4.0 µF at 450 V dc: -40°C to +65°C.

For all others: -40° C to +85°C.

Solderability: Method 208 of MIL-STD-202.

DC leakage: See table I.

Capacitance: Method 305 of MIL-STD-202.

Dissipation factor: See table I.

Terminal strength: Method 211 of MIL-STD-202, test conditions A, B, and E.

Shock, medium impact: Method 205, test condition C, MIL-STD-202.

Vibration, low frequency: Method 201 of MIL-STD-202.

Salt atmosphere (corrosion): Method 101, test condition B, MIL-STD-202.

Temperature cycling and immersion:

Temperature cycling: Method 102, test condition D, MIL-STD-202.

Immersion: Method 104, test condition C, MIL-STD-202.

DWV (insulating sleeves): Method 301 of MIL-STD-202. 4,000 volts dc applied.

DCL: Not more than 150 percent of initial measurement.

Capacitance change: 5 percent.

DF: See table I.

Corrosion: Not more than 10 percent.

Moisture resistance: Method 106 of MIL-STD-202.

Insulation resistance (insulating sleeve): Not less than 100 megohms.

DWV (insulating sleeves): Method 301 of MIL-STD-202. 4,000 volts dc applied.

DCL: Not more than 150 percent of initial requirement.

Capacitance change: 5 percent.

DF: See table I.

Corrosion - Not more than 10 percent.

Stability at low and high temperature: In accordance with MIL-C-62.

Step 1 (at +25°C):

DCL: See table I.

Capacitance change: See table I.

DF: See table I.

Step 2 (at -40°C):

Impedance: See table I.

Step 3 (at +25°C):

DCL: See table I.

Capacitance change: ±5 percent of Initial value.

DF: See table I.

Step 4 (at +85°C):

Capacitance change: 20 percent of initial value.

DF: See table I.

Step 5 (at +25°C):

DCL: See table I.

Capacitance change: ±5 percent of initial value.

DF: See table I.

Surge voltage: In accordance with MIL-C-62.

DCL: See table I.

Capacitance change: 6 percent.

DF: See table I.

Vent: Not applicable.

Life: Method 108, test condition F, MIL-STD-202.

DCL: See table I.

Capacitance change: 100 volts dc rated and less: -20, +15 percent.

DC rated voltage above 100 volts: ±15 percent.

DF: Meet the initial requirement or not exceed 150 percent of the initial measurement, whichever is greater.

Barometric pressure: Method 105 of MIL-STD-202.

Shelf life: In accordance with MIL-C-62.

Build factor: Not more than 4.0.

Shelf factor: Not more than 3. 0.

DCL: Not more than 150 percent of initial requirement.

Capacitance change: 6 percent.

DF: Not more than 175 percent of initial requirement.

Application data:

Styles CE63 and CE64 are intended for use in replacement and maintenance only.

For new design, use style CE11 or CE13.

Supersession data (see table II):

Recommended replacement Items for deleted units CE63F040R and CE64F040R are CE63C4R0R and CE64C4R0C respectively.

QUALIFICATION ASSURANCE PROVISIONS:

Qualification inspection: Not applicable.

Retention of qualification: Not applicable.

Conformance inspection: Group A inspection only.

TABLE II. Supersession data.

Superseded dash number	Recommended replacement style CE63 or CE64	Superseded dash number	Recommended replacement style CE63 or CE64
001	CE63C101E	012	CE63C6R0Q
002	CE63C250F	013	CE63C4R0R
003	CE63C750F	019	CE64C101E
004	CE63C250G	020	CE64C250F
005	CE63C500G	021	CE64C750F
006	CE63C250H	022	CE64C100J
007	CE63C200J	023	CE64C200J
008	CE63C150K	024	CE64C100K
009	CE63C120M	025	CE64C100N
010	CE63C100N	026	CE64C8R0P
011	CE63C8R0P	027	CE64C4R0R

Custodians:
Army - CR
Navy - EC
Air Force - 11
DLA - CC

Preparing activity:
DLA - CC

(Project 5910-2204-08)

Review activities:
Army - AT, AV, CR4, MI
Navy - AS, MC, OS
Air Force - 19